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Preventing the proliferation of nuclear weapons is an extremely complex and difficult problem

The Problem

Of some 193 independent nation-states around the world, only the United States, the United Kingdom, France, China, and Russia possess declared stockpiles of nuclear weapons. About a dozen other countries are thought to have an immediate nuclear weapons capability or the potential to acquire nuclear weapons within a few years.

The NPT

The Nuclear Non-Proliferation Treaty (NPT) was extended indefinitely in 1995. It calls for parties to the treaty to place their nuclear activities and nuclear materials under inspection by the International Atomic Energy Agency (IAEA).

India, Pakistan, and Israel have not signed the treaty, and thus their significant stockpiles of fissile materials are not subject to international inspection. These three countries are generally credited with the possession of nuclear weapons or the ability to produce them on short notice. Algeria also has not signed the NPT, although it has agreed to place a reactor secretly purchased from China under IAEA safeguards. Argentina has signed and ratified the NPT, but neighboring Brazil has not; however, these two countries have signed a bilateral agreement that opens their nuclear facilities to mutual inspection.

South Africa and North Korea illustrate the problems involved in verifying that NPT parties have indeed placed all their nuclear activities and nuclear materials under IAEA inspection. Before signing the NPT, South Africa had conducted significant nuclear weapons development outside of IAEA safeguards, including the clandestine fabrication of several nuclear weapons. The IAEA has had the challenging task of verifying that South Africa's nuclear weapons have indeed been dismantled and that all nuclear materials are under appropriate safeguards.

North Korea has also been problematic. The IAEA found indications that North Korea might have been withholding nuclear weapons materials from inspectors and requested a special inspection of certain suspect sites. North Korea refused and announced its intention to withdraw from the treaty. Although the withdrawal was later suspended, intense efforts by the IAEA, the United States, and others have been required to gain access to facilities of interest, continue agreements reached about the disposal of spent reactor fuel, freeze the North Korean nuclear weapons program, and institute effective IAEA safeguards. Key questions remain unanswered.

Still other NPT signatories, including Iran, Libya, and Iraq, are widely suspected of attempting to acquire nuclear weapons. Taiwan and South Korea are also countries of concern; both have admitted to pursuing nuclear weapons during the 1970s. Indeed, the extent of Iraq's nuclear weapons program, uncovered in the aftermath of the 1991 Persian Gulf War, provided a grim reminder that some countries may seek nuclear weapons under the cover of the NPT.

Soviet Nuclear Inheritor **States**

The breakup of the Soviet Union created four states with nuclear weapons on their soil (Russia, Ukraine, Belarus, and Kazakhstan) where previously there had been one. Initial concerns over the desire of all four countries to retain and independently control these nuclear weapons have been put to rest, as Ukraine, Belarus, and Kazakhstan have returned their nuclear weapons to Russia for dismantlement. In addition, Russia has declared its intent to abide by the various arms control treaties negotiated and signed by the former Soviet Union. However, there is continuing concern that economic hardship and institutional instability could break down this restraint and result in the leakage of Russian nuclear weapons materials, weapons technology, or even nuclear weapons themselves to would-be proliferators.

and National Security

Nonproliferation Limiting the spread of nuclear weapons has been a national and international objective since the U.S. developed the first atomic bomb. Continued proliferation of nuclear weapons—highlighted by revelations about Iraq's aggressive quest for nuclear arms and complicated by uncertainties in the disposition and control of former Soviet weapons and nuclear materials—has greatly increased international attention to this problem. With the end of the Cold War, countering the proliferation of nuclear weapons and other weapons of mass destruction has become a top national security priority for the United States.

Contact

Wayne J. Shotts, Associate Director, Nonproliferation, Arms Control, and International Security; Phone: (510) 423-8770; Fax: (510) 423-6305; E-mail: shotts1@llnl.gov